Supplementary Information

Carbonate-H₂O₂ Leaching for Sequestering Uranium

from Seawater

Horng-Bin Pan^a, Weisheng Liao^a, Chien M. Wai^a*, Yatsandra Oyola^b, Christopher J.

Janke^b, Guoxin Tian^c, Linfeng Rao^c

^aDepartment of Chemistry, University of Idaho, Moscow, Idaho, 83844-2343

E-mail: cwai@uidaho.edu

^bOak Ridge National Laboratory, Oak Ridge, Tennessee

^cLawrence Berkeley National Laboratory, Berkeley, California



Fig. 1S Evolution plot of the sorption of uranium from simulated seawater ($C_U = 9$ ppm, pH = 8.0, $C_{carbonate} = 0.0023$ M) at room temperature (21 °C).



Fig. 2S UV-Vis spectra (left) and the calibration curve (right) of the uranyl-arsenazo complex with various concentrations of uranium in acidic medium (pH = 1).



Fig. 3S The rate of uranium elution from the sorbent with 0.5 M HCl at room temperature (21 $^{\circ}$ C).